

EXHIBIT 156

REDACTED

On Tue, Jun 23, 2015 at 10:34 AM, Jonathan Bellack [REDACTED] wrote:

Anything that improved cookie matching without harming user latency would be generally beneficial. Could you talk to the Waterloo folks to see if that has been considered yet?

On Jun 23, 2015 6:45 AM, "██████████" wrote:

@Jonathan: I broadly agree with all the points you are making (thanks for articulating them by the way), but for the sake of the argument let me explore the amount of wiggle room we have here.

Lower adx margin: in theory one could consider charging a lower margin for a barebone service -- e.g. if the pub has a direct billing relationship with buyer, and the parties don't care about/don't need spam and malware protection on their mutual transactions (e.g. because they trust each other) we might consider dropping "unwanted" services and charging a lower margin. Yes, this is a slippery slope.

On Tue, Jun 23, 2015 at 8:36 AM, [REDACTED] wrote:

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On Tue, Jun 23, 2015 at 3:01 AM, [REDACTED] wrote:

On Mon, Jun 22, 2015 at 8:36 PM, Jonathan Bellack [REDACTED] wrote:

Respectfully, I don't think offering open RTB to everyone would end the efforts to play games with ad selection. There are a few reasons, including at least:

- Buyers that don't want to play with whatever rules we'd put in place for our RTB (security, legal, even something as little as response latency).
- Cookie matching shrinkage -- call with your own tag and you get to see 100% of cookies.
- Arbitrage and revenue guarantees -- buyers would still be motivated to offer fixed rates to get a first look, and publishers will still be tempted by revenue guarantees instead of the market.
- Soft floors -- publishers will still want to take multiple bites at demand in an effort to get closer to the first-price.
- Saving money -- unless you're proposing we offer RTB to anyone for nothing more than the cost of ad serving...

I'm also curious about this point - is the open system being proposed here DFP+AdX without a rev share?

-- Jonathan Bellack / [REDACTED]
Director, Product Management
Publisher Ad Platforms

On Mon, Jun 22, 2015 at 7:01 PM, [REDACTED]
wrote:

Consolidating readers/responders from another thread.

+1000 to Martin.

If we are committed to competition, and we believe competition drives revenue, we should allow for all sources of demand to compete fairly, in real-time (or as close to real-time) as possible.

While I can help our Sales team build a story around latency and lost impressions when trying to build waterfalls/header bidding, the fact remains that if we allowed for real-time competition across all demand sources, we wouldn't even need to have that conversation!

Further, Eng wouldn't have to build as many different features for TYM/first-look/semi-half prioritized first look/different flavors of gaining increased access in DFP. If all demand sources competed fairly, we could start stripping away the waterfalls, would immediately gain more access to inventory, make more money for publishers, increase ad viewability and engagement, and ultimately make the internet a better place.

On Fri, Jun 19, 2015 at 12:01 PM, [REDACTED] wrote:

So essentially they're saying that

- RTB bidders should be able to compete with deals
- they've figured out we do that with EDA and somehow that's unfair
- they want to do it too, and when they do, they sometimes get multiple bids on the same impression and they don't like that.
- so they're providing yet another level upstream to direct bids to do that.

Okay, so here's a bit of a wild idea:

Thinking in generic terms, all these articles I read about the spot market biz essentially boil down to the same two things:

- Providing access to the largest sources of demand to increase yield, and
- Having some sort of customizable mechanism to prioritize and order them against each other.

We [Google] have a substantial proportion of that traffic, and competition constantly strives to take that away from us by providing ways to install mechanisms upstream from ours. It used to be TYM. This time around it's header bidding. Whatever. We turn around and try to provide competing mechanisms. And this dance goes on.

So now imagine this instead: A new product that allows publishers to fetch demand from the **LARGEST** possible number of sources, including and not limited to our **COMPETITORS** and other exchanges. The point is to make sure we get **ALL** the queries passing through us at some point, even for those sections of traffic where the publisher chooses exclusively a competitor. I'm imagining a powerful ultra-programmable thing that looks like DFP but with more than the Google products.

In exchange we can provide

- Unified and easier configuration (we'd have to work on that...)
- Better and unified reporting
- Easy experiments to allow pubs to try things out with various sources of demand at the click of a button
- ... All our current products and sources of demand as we used to.

And what we get is... well, the data. So we know what's going on.

The point would be to make that dance stop altogether. The system should be open enough that there should be no reason whatsoever to ever install anything upstream from us; if there's ever a reason to do that, well that product should support it and embrace it immediately!

I realize I'm kind-of describing what DFP is, but without all the special cases between Google products, e.g. "backfill to Adx" becomes "backfill to whatever", or even something more configurable--let them program it. We could even provide a simple declarative language to let them implement their own ordering. Instead of speculating and doing deep data analyses to try to figure out what's going on behind the scenes with double

calls to Adx, for example, we could just run simple queries on configuration database tables. Knowledge is power. (Of course we'd have to win everyone over to this, so maybe this is an innocent idea).

Not sure if this is making any sense. Decoupling the serving from our products.

On Fri, Jun 19, 2015 at 11:16 AM, [REDACTED] wrote:

The header bidders are basically remarketers, trading desks and other exchanges who want to break DFP and never have to compete with direct or with AdX. They also want to be able to pull whatever signals they want. The article specifically attacked EDA as competitors feel that it gives us an unfair advantage and they are using every trick they can to make pubs think that EDA can't actually get them the best yield.

On 19 June 2015 at 10:41, [REDACTED] wrote:

Replied on another thread, but I want to bring it here too.

Header bidding sounds like another yield management layer on top of reservation. TYM + EDA is designed to achieve that. If we integrate header bidders within TYM, would that solve the problem?

On Thu, Jun 18, 2015 at 2:21 PM, Aparna Pappu <[REDACTED]> wrote:

Agree - this is not about don't use the others guys - this is about here's how you can do it profitably and without losing the user (latency, lack of real freq cap if you do it in the tag etc so more annoying ads).

We have a great opportunity to build a stronger indirect demand solution in DFP to do exactly that.

On Thu, Jun 18, 2015 at 1:59 PM, [REDACTED] wrote:

So maybe I'm reading this simplistically, but it sounds like header bidding is just a way of implementing ad serving logic in the <head> tag of the browser instead of an ad server, and publishers are doing it because their ad server doesn't do what they want (e.g. getting inventory to compete on both Rubicon and AdX). It's very rational for publishers to want to integrate all possible demand sources, and if our answer is "you don't need those demand sources" rather than "here's how to integrate those demand sources smoothly with high yield and low latency" I believe we'll lose publishers.

On Thu, Jun 18, 2015 at 9:44 AM, [REDACTED] wrote:

+ [REDACTED]

I strongly feel we have to come out much stronger publicly on the value of more